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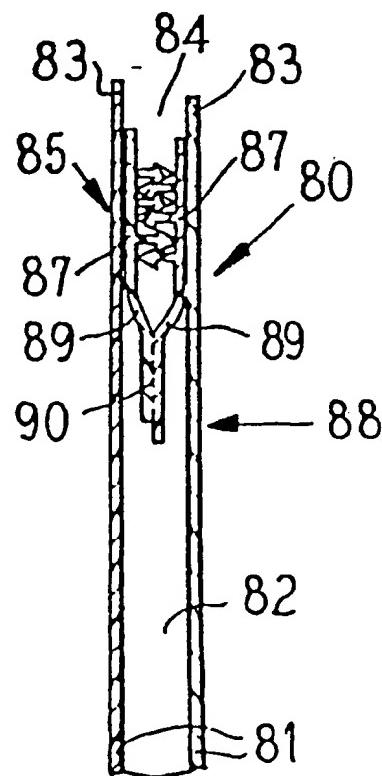
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(54) Reclosable bag having an outer reclosable zipper type closure and inner non-reclosable closure.

(57) A bag has wall panels defining a receptacle space and providing a bag mouth arrangement between upper end portions of the wall panels. A tamper evident, and if desired hermetic seal, non-reclosable closure adjacent to a reclosable zipper and located adjacently below upper end portions of the wall panels is accessible to be opened when the zipper is open. The zipper is arranged for intermittent opening and closing of the bag. The non-reclosable closure is a peel seal.



EP 0 456 277 A2

This invention relates to a bag having wall panels defining a receptacle space therebetween, and comprising: a bag mouth arrangement defined between upper end portions of said wall panels; reclosable zipper means functioning for selectively opening and closing said mouth arrangement and comprising fastener strips carried by the inner confronting surfaces of said wall panels and each of said fastener strips further comprising an inwardly projecting flange extension; and one-time openable non-reclosable closure means initially maintaining said mouth arrangement closed and being openable only when said reclosable zipper means is open.

Bags of this general type are known from FR-A-2 546 481 which discloses separately produced re-openable zipper closure units comprising a connecting bridge element connecting the complementary zipper means profiles thereof with said bridge element forming a one-time openable non-reclosable closure means which is permanently broken along a line of weakening at the time of a first access to the content of the bag.

Further, numerous and varied reclosable bag structures have been proposed, and some have proven to be commercially quite good.

In particular, there has been some emphasis on providing tamper evident bags, and bags that are hermetically sealed until they are opened for access to the contents, whereafter a reclosable fastener device comes into play for maintaining the contents within the bag until access is again desired. By way of example, attention is directed to the following U.S. Patents as representative of various approaches to the type of bag with which the present invention relates by way of improvement:

US-A-2,987,769 and US-A-3,172,443 disclose non-reclosable frangible connections of fastener profiles.

US-A- 3,325,084 discloses a closure flap provided with closure profiles that will meet with closure profiles on the front of the bag or package.

US-A- 3,326,399 discloses the use of magnetic reclosable fastening means.

US-A- 3,198,288; 3,473,589 and 3,780,781 disclose reclosable profile fasteners or zippers, and a tear off top on the bag for access to the zipper.

US-A- 3,543,343 discloses a bag with reclosable fastener profiles and a tear cord for opening the bag.

US-A- 3,625,270, discloses a tear ribbon device for opening the bag.

US-A- 3,746,215, discloses a funnel arrangement which retains the bag sealed closed until the funnel is everted and the end snipped off.

US-A- 3,991,801; 4,191,230 and 4,235,653, disclose other arrangements of funnel bags.

US-A- 4,241,865, discloses a heavy duty bag

to be made from paper and equipped with a primary rip cord closure and a hood thereover provided with a reclosable zipper of the interlocking teeth type.

5 In spite of the fairly high state of development in this art, there is still room for improvement and the attainment of simplicity and economy in dual fastener bags, that is, bags that have hermetic or at least tamper evident non-reclosable closure means and associated reclosable zippers.

An important object of the present invention is to provide a new and improved bag or package structure having non-reclosable closure means which is readily digitally openable when associated reclosable zipper means are in an open condition, the bags being reclosable by means of the zipper means.

This object is accomplished by means of a bag of the general type indicated above and being 20 characterized in that both said non-reclosable closure means and said reclosable zipper means are located below the upper ends of said upper end portions of said wall panels and that said non-reclosable closure means comprises a peel seal 25 releasably securing said flange extensions to each other.

Stated otherwise, the present invention provides a bag having opposed wall panels permanently closed or at least permanently closable at a bottom end of the bag and at opposite sides of the bag, and comprising a bag mouth defined by and between upper end portions of the wall panels, reclosable zipper means including complementary interengagable zipper profiles located substantially 30 below the upper ends of the upper end portions and responsive to digital closing pressure for attaining a closed condition of the zipper means for closing the mouth, the zipper means being openable responsive to digital pull-apart force for opening 35 the bag mouth to gain access into contents reserving space within the bag, non-reclosable closure means located in spaced adjacency to the reclosable zipper means for initially maintaining the bag mouth arrangement closed independently of the zipper means, and the non-reclosable closure means being openable by pull-apart force when the reclosable zipper means is open.

The present invention will be readily apparent 50 from the following description of a representative embodiment thereof, taken in conjunction with the accompanying drawing in which the only

Figure is a fragmentary vertical sectional view of a bag embodying the invention and comprising a combination of zipper and non-reclosable fastener means.

According to the Figure, a bag 80 has wall panels 81 closed or at least closable along the bottom and side edges of the bag similarly as the

bag 65 and providing a receptacle space 82. At the upper end portions of the wall panels 81, pull flanges 83, one of which may be longer than the other, define therebetween a bag mouth 84. Inwardly adjacent to the pull flanges 83 is a zipper 85 in the form of complementary extruded plastic multi-profile fastener strips 87. The non-reclosable closure means 88 which are located inwardly relative to the zipper 85, comprises inwardly, that is downwardly, extending flange extensions 89 from the inner sides of the fastener strips 87. The flange extensions 89 are initially sealed together by a peel seal 90 for maintaining the mouth 84 closed independently of the reclosable zipper 85. When it is desired to open the bag 80 for access into the space 82, the zipper 85 is opened by pull-apart digital force applied to the pull flanges 83. By continuing the pull-apart force, the non-reclosable closure means 88 can be opened by the pull-apart force peeling the seal 90 apart. Intermittent closing of the bag 80 can then be effected by reclosing the reclosable zipper 85.

Claims

1. A bag (80) having wall panels (81) defining a receptacle space (82) therebetween, and comprising:

a bag mouth arrangement defined between upper end portions of said wall panels (81);
reclosable zipper means (85) functioning for selectively opening and closing said mouth arrangement and comprising fastener strips (87) carried by the inner confronting surfaces of said wall panels (81) and each of said fastener strips (87) further comprising an inwardly projecting flange extension (89);
one-time openable non-reclosable closure means (90) initially maintaining said mouth arrangement closed and being openable only when said reclosable zipper means (85) is open,

said bag being characterized in that both said non-reclosable closure means (90) and said reclosable zipper means (85) are located below the upper ends of said upper end portions of said wall panels (81) and that said non-reclosable closure means comprises a peel seal (90) releasably securing said flange extensions (89) to each other.

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